

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,356,416 B2  
APPLICATION NO. : 09/768686  
DATED : April 8, 2008  
INVENTOR(S) : William B. Busa

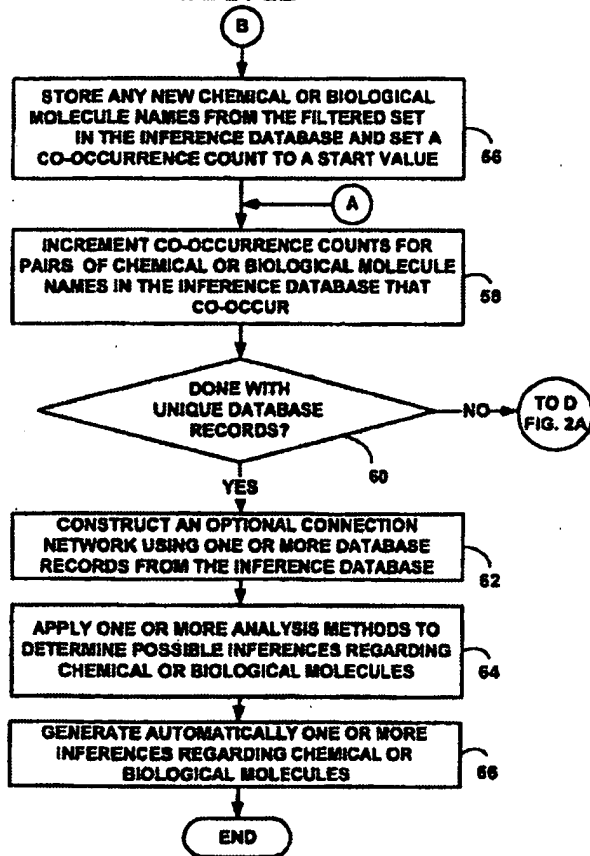
Page 1 of 7

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Drawings

Sheet 3, replace Fig. 2B with the figure depicted below, wherein in step 56 "IN THE IN THE" has been changed to --IN THE--

**FIG. 2B**



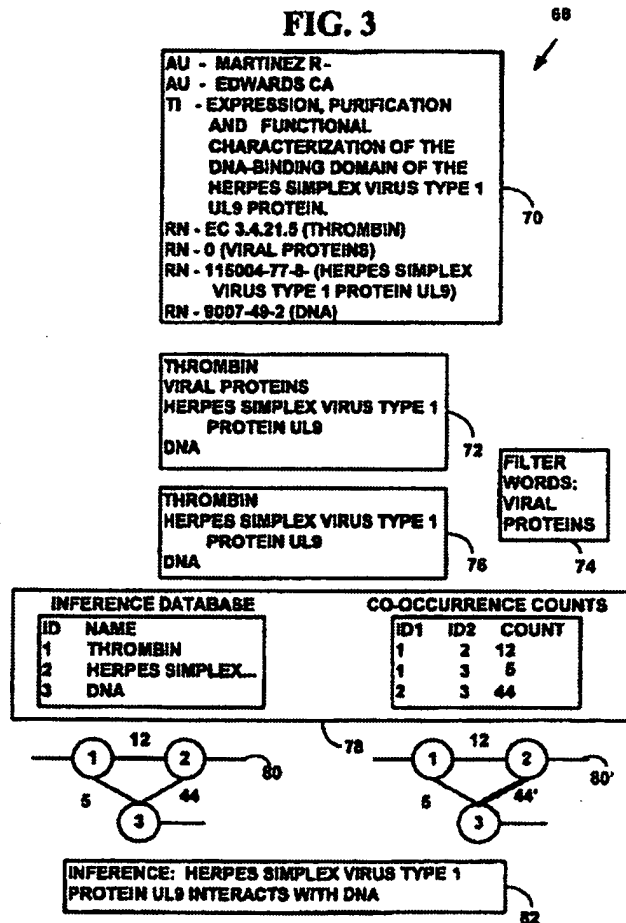
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Sheet 4, replace Fig. 3 with the figure depicted below, wherein in box 78, "4" has been changed to --5--



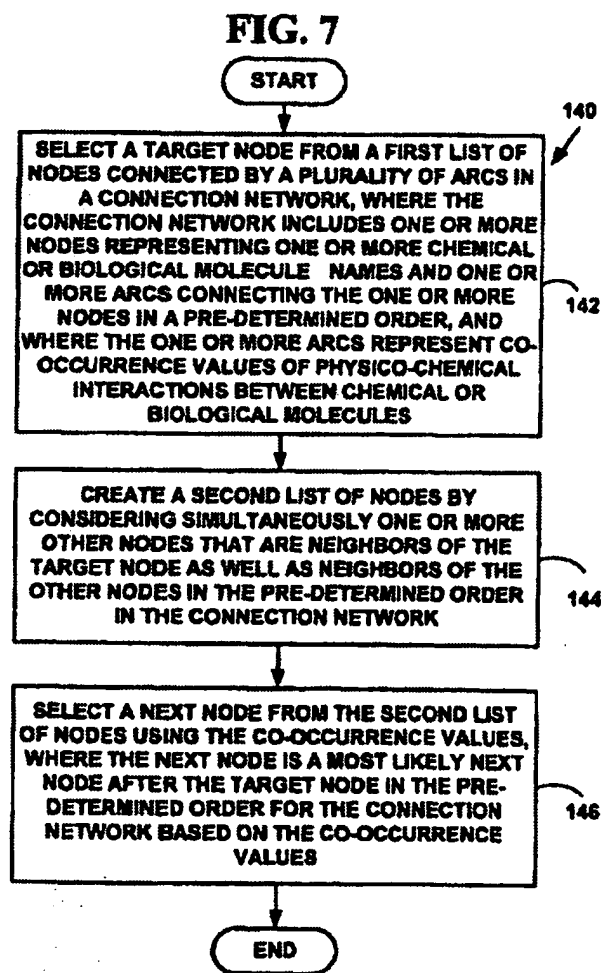
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Sheet 8, replace Fig. 7 with the figure depicted below, wherein in step 142  
"MOLECULES NAMES" has been changed to --MOLECULE NAMES--



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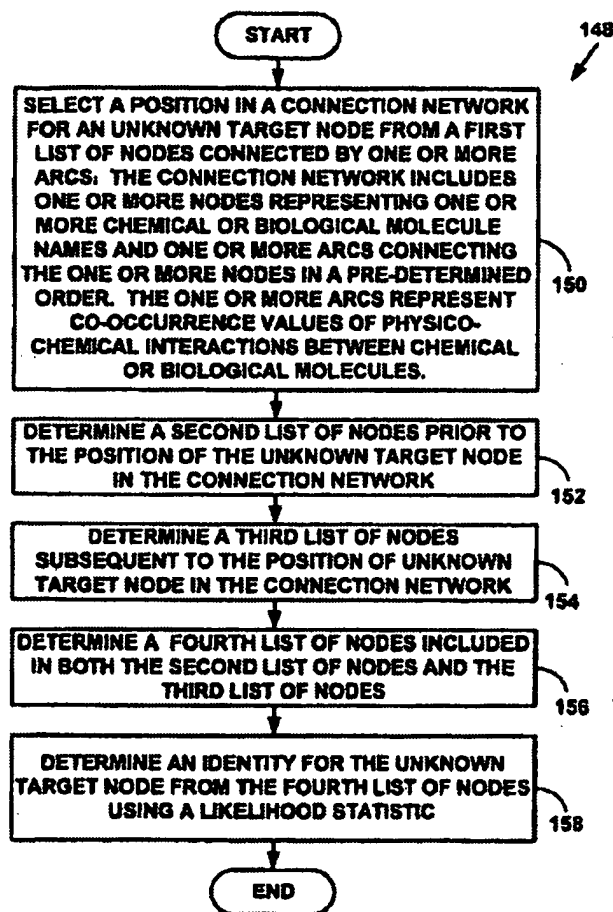
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Sheet 9, replace Fig. 8 with the figure depicted below, wherein in step 150  
"MOLECULES NAMES" has been changed to --MOLECULE NAMES--

**FIG. 8**



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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 3

Line 23, change ""Bioknowledge Library" This" to --"Bioknowledge Library." This--

Column 5

Lines 16-17, change "checking automatically" to --automatically checking--

Column 8

Line 57, change "20 analysis." to --analysis.--

Column 9

Table 1, in the twenty-fourth entry, change "0 (serotonin 10 receptor)" to --0 (serotonin 1C receptor)-- as depicted herein below.

RN - 0 (serotonin 1C receptor)

Column 9

Table 1, in the forty-seventh entry, change the multiple instances of "P1" to --PI-- as depicted herein below.

AB - Recent studies have established a role for the phosphoinositide (PI) cycle in the early patterning of *Xenopus* mesoderm. In explants, stimulation of this pathway in the absence of growth factors does not induce mesoderm, but when accompanied by growth factor treatment, simultaneous PI cycle stimulation results in profound morphological and molecular changes in the mesoderm induced by the growth factor. This suggests the possibility that the PI cycle exerts its influence via crosstalk, by modulating some primary mesoderm-inducing pathway. Given recent identification of mitogen-activated protein kinase (MAPK) as an intracellular mediator of some mesoderm-inducing signals, the present study explores MAPK as a potential site of PI cycle-mediated crosstalk. We report that MAPK activity, like PI cycle activity, increases in intact embryos during mesoderm induction. Phosphoinositide cycle stimulation during treatment of explants with basic fibroblast growth factor (bFGF) synergistically increases late-phase MAPK activity and potentiates bFGF-induced expression of *Xbra*, a MAPK-dependent mesodermal marker.

Column 11

Line 10, change "in included the set" to --included in the set--

Line 51, change "as to" to --to--

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 14

Line 25, change "84" to --82--

Column 16

Line 42, change "P(-A|-B) a" to --P(-A|-B)  $\equiv$  a--

Line 64, change "network 82" to --network 80--

Column 18

Line 51, change "molecules names" to --molecule names--

Column 19

Line 26, change "Node F," to --Node F 124,--

Line 29, change "122" to --124--

Column 20

Replace Table 4 with the table depicted below, wherein "WHERE Chem 1 = 'A'" has been changed to --WHERE CHEM\_1 = 'A'--

**TABLE 4**

---

```
SELECT Chem_2, Likelihood FROM Chem_Pairs
WHERE Chem_1 = 'F' AND Chem_2 IN
(SELECT Chem_2 FROM Chem_Pairs
WHERE Chem_1 = 'D' AND Chem_2 IN
(SELECT Chem_2 FROM Chem_Pairs
WHERE Chem_1 = 'A'))
```

---

Column 21

Line 14, change "molecules names" to --molecule names--

Replace Table 5 with the table depicted below, wherein: "WHERE Chem\_1 = '0' AND CHEM\_2 IN" has been changed to --WHERE Chem\_1 = 'D' AND Chem\_2 IN-- and the second "(SELECT Chem\_2 FROM Chem\_Pairs)" has been changed to --(SELECT Chem\_2 FROM Chem\_Pairs)--

**TABLE 5**

---

```
SELECT Chem_2, Likelihood FROM Chem_Pairs
WHERE Chem_1 = 'D' AND Chem_2 IN
(SELECT Chem_2 FROM Chem_Pairs
WHERE Chem_1 = 'A')
And
SELECT Chem_2, Likelihood FROM Chem_Pairs
WHERE Chem_1 = 'F' AND Chem_2 IN
(SELECT Chem_2 FROM Chem_Pairs)
```

---

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 23

Line 6, change ““signal transduction.”,” to --“signal transduction,”--

Column 24

Line 50, change “construct” to --to construct--

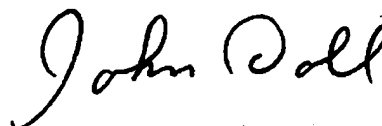
Line 61, change “biological” to --checking biological--

Column 25

Line 10, change “embodiments in” to --embodiments--

Signed and Sealed this

Seventeenth Day of February, 2009



JOHN DOLL  
*Acting Director of the United States Patent and Trademark Office*